

Claims

I claim:

- 5 1. A method of treating an individual exhibiting at least one symptom
of a mental disorder, the method comprising administering to the individual an antimicrobial
composition in an amount effective to inhibit or eliminate the at least one symptom of the disorder.

- 10 2. The method of claim 1 wherein the mental disorder is selected from the
group consisting of anxiety disorder, attention deficit/hyperactivity disorder, autistic disorder,
bipolar disorder, major depression, mood disorder, pervasive developmental disorder, psychotic
disorder and schizophrenia.

- 15 3. The method of claim 1 wherein the antimicrobial composition is selected from
the group consisting of cationic peptides, cephalosporins, glycopeptides, macrolides,
nitroimidazoles, polypeptides, semi-synthetic penicillins, and polymyxins.

- 20 4. The method of claim 3 wherein the antimicrobial composition is further selected
from the group consisting of amoxicillin, bacitracin, cefpodoxime proxetil, clarithromycin,
metronidazole, polymyxin B, and vancomycin.

5. The method of claim 1 wherein the antimicrobial agent can be administered
orally.

- 25 6. The method of claim 1 wherein the antimicrobial agent can be administered
rectally.

7. The method of claim 1 wherein the antimicrobial agent can be administered
parenterally.

- 30 8. A kit for treating an individual exhibiting at least one symptom of a mental
disorder, the kit comprising an antimicrobial composition in an amount effective to inhibit or
eliminate the at least one symptom of the disorder.

9. The kit of claim 8 wherein the mental disorder is selected from the group consisting of anxiety disorder, attention deficit/hyperactivity disorder, autistic disorder, bipolar disorder, major depression, mood disorder, pervasive developmental disorder, psychotic disorder and schizophrenia.

5

10. The kit of claim 8 wherein the antimicrobial composition is selected from the group consisting of cationic peptides, cephalosporins, glycopeptides, macrolides, nitroimidazoles, polypeptides, semi-synthetic penicillins, and polymyxins.

10

11. The kit of claim 10 wherein the antimicrobial composition is further selected from the group consisting of amoxicillin, bacitracin, cefpodoxime proxetil, clarithromycin, metronidazole, polymyxin B, and vancomycin.

12. The kit of claim 8 wherein the antimicrobial agent can be administered orally.

15

13. The kit of claim 8 wherein the antimicrobial agent can be administered rectally.

14. The kit of claim 8 wherein the antimicrobial agent can be administered parenterally.

20

15. A method of treating an individual exhibiting at least one symptom of a mental disorder, the method comprising administering to the individual an antimicrobial composition in an amount effective to inhibit or eliminate the at least one symptom of the disorder and administering to the individual a probiotic mixture to replenish gastrointestinal microbes.

25

16. The method of claim 15 wherein the mental disorder is selected from the group consisting of anxiety disorder, attention deficit/hyperactivity disorder, autistic disorder, bipolar disorder, major depression, mood disorder, pervasive developmental disorder, psychotic disorder and schizophrenia.

30

17. The method of claim 15 wherein the antimicrobial composition is selected from the group consisting of cationic peptides, cephalosporins, glycopeptides, macrolides, nitroimidazoles, polypeptides, semi-synthetic penicillins, and polymyxins.

5 18. The method of claim 17 wherein the antimicrobial composition is further selected from the group consisting of amoxicillin, bacitracin, cefpodoxime proxetil, clarithromycin, metronidazole, polymyxin B, and vancomycin.

19. The method of claim 15 wherein the probiotic mixture comprises at least one
10 gastrointestinal microbe.

20. The method of claim 19 wherein the at least one gastrointestinal microbe is selected from the group consisting of *Bifidobacterium adolescentis*, *Bacteroides distasonis*, *Bacteroides fragilis*, *Bacteroides ovatus*, *Bacteroides thetaiotamicron*, *Bacteroides vulgatus*,
15 *Clostridium bifermentans*, *Clostridium innocuum*, *Clostridium ramosum*, *Escherichia coli*, *Eubacterium aerofaciens*, *Peptostreptococcus productus*, and *Streptococcus faecalis*.

21. The method of claim 15 wherein the antimicrobial agent can be administered orally.

20

22. The method of claim 15 wherein the antimicrobial agent can be administered rectally.

23. The method of claim 15 wherein the antimicrobial agent can be administered
25 parenterally.

24. The method of claim 15 wherein the probiotic mixture can be administered orally.

30 25. The method of claim 15 wherein the probiotic mixture can be administered rectally.

26. A kit for treating an individual exhibiting at least one symptom of a mental disorder, the method comprising administering to the individual an antimicrobial composition in an amount effective to inhibit or eliminate the at least one symptom of the disorder and administering to the individual a probiotic mixture to replenish gastrointestinal microbes.

27. The kit according to claim 26 wherein the mental disorder is selected from the group consisting of anxiety disorder, attention deficit/hyperactivity disorder, autistic disorder, bipolar disorder, major depression, mood disorder, pervasive developmental disorder, psychotic disorder and schizophrenia.

28. The kit according to claim 26 wherein the antimicrobial composition is selected from the group consisting of cationic peptides, cephalosporins, glycopeptides, macrolides, nitroimidazoles, polypeptides, semi-synthetic penicillins, and polymyxins.

29. The kit according to claim 28 wherein the antimicrobial composition is further selected from the group consisting of amoxicillin, bacitracin, cefpodoxime proxetil, clarithromycin, metronidazole, polymyxin B, and vancomycin.

30. The kit according to claim 26 wherein the probiotic mixture comprises at least one gastrointestinal microbe.

31. The kit according to claim 30 wherein the at least one gastrointestinal microbe is selected from the group consisting of *Bifidobacterium adolescentis*, *Bacteroides distasonis*, *Bacteroides fragilis*, *Bacteroides ovatus*, *Bacteroides thetaiotamicron*, *Bacteroides vulgatus*, *Clostridium bifermentans*, *Clostridium innocuum*, *Clostridium ramosum*, *Escherichia coli*, *Eubacterium aerofaciens*, *Peptostreptococcus productus*, and *Streptococcus faecalis*.

32. The kit according to claim 26 wherein the antimicrobial agent can be administered orally.

33. The kit according to claim 26 wherein the antimicrobial agent can be administered rectally.

35. The kit according to claim 26 wherein the probiotic mixture can be administered orally.

36. The kit according to claim 26 wherein the probiotic mixture can be administered rectally.